

SEQUENCE LISTING

<110> Sun, Yongming
 Recipon, Herve
 Ghosh, Malavika
 Liu, Chenghua

<120> Compositions and Methods Relating to Colon Specific
 Genes and Proteins

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<150> 60/244,758

<151> 2000-10-31

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<170> PatentIn Ver. 2.1

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<213> Homo sapiens

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ttcttnganc actgngnctt tttactgggc ccttaccctt accctgnata gttacattgg 240
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atctaaaaat ttttaataaaa tagaacctta aagggagaaa aatcacaccg tgagcccaag 180
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<211> 719

<212> DNA

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gaggaaatct ttgtttgtaa tgtataacct atttgttacc tgcaactgaa agacaatgaa 480
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<223> a, c, g or t

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tgatnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
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cgaggggaga tcagctctcc cgcaacctgg tgccgctctc tgacagcaca acagaacctt 180
aggggctaca ggatgattca aggaacagtg tgctacagga cctcggtatt cctgctgaga 240
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ctacaaccac tcaaggctctg caaacagatt cctattttaga tggtgttgag agctgaattt 420
ctggaacaag agatatagat taagactgtt gttacatgtt gcctacatga ctttc 475

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<212> DNA

<213> Homo sapiens

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cgagggggaga tcagctctcc cgcaacctgg tgccgctctc tgacagcaca acagaacctc 180
aggggctaca ggatgattca aggaacagtg tgctacagga cctcggtatt cctgctgaga 240
gtcatttcct gtgctggatt taccatcaca gggaccagat ttatagaaaa atgaacatgt 300
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ctggaacaag agatatagat taagactggt gttacatggt gcctacatga cttttcaaaa 480
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<211> 743

<212> DNA

<213> Homo sapiens

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aatattctag aaaataacaa gcttatgaca ggaatactat atcagagtca agagaaaaca 180
aaagtatagg taaagactga atttatcata gcccaagaca aggagcagga actgacattt 240
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tgctgtgcca agaaagcttc tttggaggcc attgccataa tctactgttt acatttgtgc 660
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<211> 548

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<213> Homo sapiens

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aagggtggtca ggtagctctc ctgagcagtt ttccaccatg tgggtgattca gggatccaag 420
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cacattctat cacgaggctt agccatattg gagtttttca cttcgggtgat gaggatgagg 480
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gatgaggatg agggagaaaag tgggagagag tgaagagagg gagaaagggt gaaaaggagg 720
aaagaaggag aagggtggaa ggagagagag agaaattgag aaagtgagaa aaaaaaaaaa 780
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<212> DNA
<213> Homo sapiens

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ccaaaacact gaaactccct ctacttatga aataaacaaa ctggcttaaa ttgggtggaa 360
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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

<220>
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<210> 19

<211> 2961

<212> DNA

<213> Homo sapiens

<400> 19

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<213> Homo sapiens

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<400> 24

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<222> (5780)

<223> a, c, g or t

<220>

<221> unsure

<222> (5885)

<223> a, c, g or t

<400> 25

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tcggaatggt	cccttctgtt	tgtcccttcc	aggctggaca	ctttgggagc	agaagtcaaa	720
gacaccttta	tcattgtacc	ctcagcacct	ggtgtagtgc	ctgggattta	gtagttctga	780
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<210> 28

<211> 191

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (175)

<223> a, c, g or t

<400> 28

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ccgtctgtag catgggaggg gcctggagca tagcagggcc tctcacgggc tttgntttca 180
 ggttgacatt t 191

<210> 29
 <211> 998
 <212> DNA
 <213> Homo sapiens

<400> 29
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 aatggtgtga tctcggtca ctgcaacctc cacctcccag gctcaagtga ttctcctgcc 180
 ttggcctccc aagtagctgg gattacagge atgcactaca acgcccagct aatttttgca 240
 tttttagtag agataggggt tcacatggt ggccaggctg gtctcaact cctgacttca 300
 ggtgatccat ccattctggc ctcccaaagt gctgggatta caggcgtgac agctgtgccg 360
 ggcccacctt ttaaagtca acctgaaacc aaagcccgtg agaggccctg ctatgctcca 420
 ggcccctccc atgctacaga cggcatgcta acggttgggt ggggggtcct gtaaattctca 480
 ccaatgggtt ctgcactcct tgacctgct ctttaagcact gaccttcagg agcttgaagc 540
 gagaagctgg aacaatgaag tgtctattct gcttcttctt gcaaagtctg caactacaga 600
 aagacagagc aaattccaga ttgtgagcag ccacctgcat cctctatgcc tgagcggccc 660
 agccatgaga gccagccgac cccacagatg atgccccctt cagcaccatc cagggccgag 720
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<210> 30
 <211> 282
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (5)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (17)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (29)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (110)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (128)..(217)
 <223> a, c, g or t

<400> 30
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 cttaaaaaact acacatagaa acagggtaga atggtagtta tccaggctcn ggaggaagag 120
 aaaacaannnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 180
 nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnngta tatggaaaat ttgctgagag 240
 actagattttt aggtattcta cctcaattaa aaaggtaatt gt 282

<210> 31
 <211> 1225
 <212> DNA
 <213> Homo sapiens

<400> 31
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 aggaagtgtac tagtttggtt aagagctggg aactgagtca ggtaagccgt gtcattgtgt 180
 aactccacca gaaaatggag gagagcgggt ttccaggaga caaagctgag atgagaagtgt 240
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 aggccttgctt gctactcct tctctcttctc cagagggaaa ccttggtggtg gttcctcact 360
 gtctattcat tatgcaagga aatgagggct ttttaagggtt cctcagattt ttctccacca 420
 aagagtgtct tcacaagtta ttgagggcgt tgtttccatt ttaaagtaaa cttttggaat 480
 tttttttctc cttttgagtg gacctgaagg gttttgacct ccttcaggaa aggcaaggca 540
 aaaacttaaa acagttcact gaggtctcac acaactttta gctgctccag gtctcctgaa 600
 agtcaccagg aaatgtgatt tcctccttgt gaagatgggtg atggccctaa gctgagattt 660
 ttttgagttc taggggtttg ttatcatcat gttttgatgc attgcaagac tttattgtct 720
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 caatgtcgct atggaaacaa atttttaaaaa catgatgtca gttgagaaaa cttatgtct 1020
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 aggataattt gaaaaaagga cccagtgtca ccctagtcca cacacattga tgggagctct 1140
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 tgcttcagga atttttaaaa gccaa 1225

<210> 32
 <211> 844
 <212> DNA
 <213> Homo sapiens

<400> 32
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 aatttgctct gggttttctag tacctcaagg cagatatgca aagggtgttta ggagacatac 180
 tctcagacaa accattatta ttttaaagga tagaacaaaa caatcgctag ttaaggaaga 240
 tgttttgtaa taattaaact tgtaattatt tgacttgaaa tatttaaatca tttttttggg 300
 aaagaatgga tagattttgt taatgttagc actcttaaaa ttaagcagtg gcttttttcc 360
 ccgtgtctcc catattctcc ttgtgtttga aacataaaac aaacactaaa cctaagcaaa 420
 agttgctggg tttgttttca taattgaggt gagtttttcc ctcaactatt acaataaaaag 480
 aaaacttttt atgattttta tgataatgtt ttgtggtggg ttaaagacct cctaacaaca 540
 ggggggtttt atacaacaac aagaagtttt taaataattg agttttttaa gtggaaagca 600
 gcagtaaatt aaactagaag gatataatct atacctagaa ataaataaag ctcaacttgt 660
 tttgtaagcc tgttttaaaa atatttaatc atttaatttg tgcaagtata gagttctcct 720
 atggcaaaac tataccatca tcttctccaa ttgtgcatgg cagctgtact aagttctgca 780
 aaaacaagac atatggatgt gtttcatacc ttctcagaat tggatatca agacacattt 840
 aaat 844

<210> 33
 <211> 2483
 <212> DNA
 <213> Homo sapiens

<400> 33
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 gcagttcaag caattctact gctcagcct ctcaagtagc tgggactata gacattcacc 180
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 ccaaagtgtc gggattacag gctgagcca ctgtgccag ccctcaagta actcttaaac 360
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 ataaagttcc ttcttctgac aaactttaag tgtgttcttg atttcttgc ctccctcttc 480
 ctctgggagt tttcttccct agctgtcac tttcattatc aacgaaatat tctcttcac 540
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 tttcaccaac ctatttatca aatttacatc cccctccctt tctacttctt tttgtaaaaa 660
 aagagcatte aacctattgt ctgtctccat gccctcacat tatcagtgca agcaccgcga 720
 actgtggctc tccaccatgt gagctcaacc tatcatcaca actgtatctc ccctaacact 780
 catttagatt aagccatttt tcacaagttt ctaaaattat ctcttccatt tctcagtata 840
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 ccaaggccac cccgaacaca tcttttctct ttccctaaat aaattctact ggattctttc 960
 tgtttttcac tggaaaactc tcatactcca ttggttcctt tctcatgaca tttattttac 1020
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aatttttcaa	aattatagga	tatgatctaa	agatatattt	taaaactcaa	acctgtaatt	1320
ttatcttcag	ttatgctata	gcatgtacat	ttccattctc	ttgtcgaagt	ttctttcgtt	1380
cctcagcttc	tccttcatat	ttcctgacgt	attgtcttct	aagccttcag	agaacaaggc	1440
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gggggttcca	cttcatgagt	agtgatagac	cagcaatcac	tatacttgac	actaaaccta	1560
aacctggcta	taaaatatta	ccaatttcta	aggggggtatt	tatgttgact	gtatataaat	1620
ccattttccag	agggcttata	tttaaagtgt	tcttgatata	ccaattctga	gaaggtaga	1680
aacacatcca	tatgtcttgt	ttttgcagaa	cttagtacag	ctgccatgca	caattggaga	1740
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cttggtgttg	tataaaaacc	ccctgttgtt	aggagggtctt	taaccaccca	caaaacatta	1980
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ttatgaaaac	aaaccagca	acttttgctt	aggtttagtg	tttgttttat	gtttcaaaca	2100
caaggagaat	atgggagaca	cggggaaaaa	agccactgct	taattttaag	agtgctaaca	2160
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acaagtttaa	ttattacaaa	acatcttcct	taactagcga	ttgttttggt	ctatccttta	2280
aaataataat	ggtttgtctg	agagtatgtc	tcctaaacac	ctttgcatat	ctgccttgag	2340
gtactagaaa	accaggacaa	attctagtgt	gtgcaaaaata	aatttaagct	acatatcaaa	2400
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aaaataattg	tcaccatggc	aga				2483

<210> 34
 <211> 591
 <212> DNA
 <213> Homo sapiens

<400> 34	
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caaatatata	tctcacctct taaaattcgt ttagtttgaa attaaaatta gtattgtttt 120
tctgcatgta	ctcctagggt gggtaaagaa gggaacaagg gaatggggaa acgtagagat 180
tcctggacta	acagagaaag acagcttgag aataaaagta tgcaaaagat aatctacaac 240
aaaataatgc	acttaactct tgttactaaa caaataagct acccacattt cagcttatct 300
gtatttgttt	catgatttgt cagctatcta gcaactatct tagtcaactga ttcggaacga 360
cttagcagtg	gttattgcat agaacaactc cttacacaga gatttgcaag ctttctgaac 420
tttcgtactt	tcaaattgaa aatcaggaga aacattttca acggcttcatt attcagacca 480
agattagtat	attaacaact aataacaata ttaaaagtta gaacaattcc tttcctctat 540
ctttctcagg	acaaactcga gcttattaga aaactaggga gtgatctggt g 591

<210> 35
 <211> 306
 <212> DNA
 <213> Homo sapiens

<400> 35

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ctccagagtt acccagagag tcaacagtca tgctgctttt tgtacttagt ctgggtgtttc 120
agtaccagtt taacacataa aaagtgatca aggtgcaagg gacacagctt tgaaatagtc 180
agacctggat ctgaatctgt gattctgtca tctgcaataa gtttctaact tctccaagcc 240
ttagtTTTTT atctgtaaag gggagtatta actagagatg aggattaaat gaaaagtcac 300
ttactc 306

<210> 36

<211> 617

<212> DNA

<213> Homo sapiens

<400> 36

ccaagactga gttagatTTT ctattatgta ctcccatggc aacagcattt tccacttaac 60
ttgttggaag agggacaact gtcctctggg ggctctgttg ccaatatttg ttccactttc 120
tctttcattt tcaactttctt ccttacctt gcaatccaga gtccagatgt aaaacagtgt 180
agggccataa gtgatgggac atctctaaca aaattcttgg aggtgctgc ctggaaactt 240
gtgtccttgg gatggtaccc ttacccttga ggtgctaggg atgggccccca gggctctttcc 300
ctgcttttcta ctttccctaag ggctaagtga tgtcagagga caacatcttg atgtgtagag 360
gtacaagaat tcagggatgc aaggatgcct tctgcaaga cagagatcat tctatctaaa 420
ccaatgtttt cagggttttt actaggagca catgcatgaa tgtgtatata tgtgtatagc 480
tatgcaaaaa catgaacaga tgtatgcatg tgtataatct aaaacacata aaggtacata 540
tactgacata ctgaaacaca tattaatata accaaaaata aaaatttcat gagacagtat 600
taatgtttac cacatgc 617

<210> 37

<211> 725

<212> DNA

<213> Homo sapiens

<400> 37

ccaagactga gttagatTTT ctattatgta ctcccatggc aacagcattt tccacttaac 60
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tctttcattt tcaactttctt ccttacctt gcaatccaga gtccagatgt aaaacagtgt 180
agggccataa gtgatgggac atctctaaca aaattcttgg aggtgctgc ctggaaactt 240
gtgtccttgg gatggtaccc ttacccttga ggtgctaggg atgggccccca gggctctttcc 300
ctgcttttcta ctttccctaag ggctaagtga tgtcagagga caacatcttg atgtgtagag 360
gtacaagaat tcagggatgc aaggatgcct tctgcaaga cagagatcat tctatctaaa 420
ccaattgttt tcagggtttt tactaggagc acatgcatga atgtgtatat atgtgtatag 480
ctatgcaaaa acatgaacag atgtatgcat gtgtataatc taaaacacat aaaggtacat 540
atactgacat actgaaacac atattaatat aaccaaaaata aaaatttcat gagacagtat 600
taatgttaac cacatgctat atacttatat ttttctttca tttgcaaaaag aatgctgtta 660
tgactgtcta aacctctggc ttgagaaaaa aaaaaaaaaa aaaaagatct ttaattaagc 720
gtgcc 725

<210> 38
<211> 90
<212> DNA
<213> Homo sapiens

<400> 38
gtaaaatatac tgtctcactg gcaatTTTTT ttacattgaa tttgttgaca atTTTTTTac 60
attgaatatg ttaaaatttt tatatatggg 90

<210> 39
<211> 222
<212> DNA
<213> Homo sapiens

<400> 39
tgtagagatg ggatctctct ttgttgcccg ggctggctctg gaattctctg ggttcagggtg 60
atcctgctac gtcagccatg agccacgggtg cccagcctgg caggcttggt ttctcttaac 120
gcctctcctt ggcttgcaag atggccacct tctggctgtg tctctctct catggccttt 180
cctttgtggg cacacatcct tgttctctcc ttcttcttat aa 222

<210> 40
<211> 257
<212> DNA
<213> Homo sapiens

<400> 40
gttttcccat tgactaacgc ttaagatata ttggagtcaa atgctcataa aatgctcatc 60
caatgcttat aaaatattag agttgaaatg gactctctgt tcatgcagat gatgagaccg 120
aaacagagag cttccaggag gatcaatgcc attcaatgag cttgctgctg tactccctc 180
tacacaatat ggatatatcc catcccagcc cgagactggc cataactagt ctagtaactg 240
aggctttcct cctactt 257

<210> 41
<211> 263
<212> DNA
<213> Homo sapiens

<400> 41
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gctcatcaat gcttataaaa tattagagtt gaaatggact ctctgttcat gcagatgatg 120
agaccgaaac agagagcttc caggaggatc aatgccattc aatgagcttg ctgctgtact 180
ccctctaca caatatggat atatcccatc ccagcccag actggccata ctagttctag 240
taactgaggc tttcctccta ctt 263

<210> 42
<211> 533
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (501)
<223> a, c, g or t

<220>
<221> unsure
<222> (514)
<223> a, c, g or t

<220>
<221> unsure
<222> (528)
<223> a, c, g or t

<400> 42
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aaaaaaaaatc acagataagt acttaaaaca ctcaagattt gggattttaga tcatgattag 120
atacaataga aagatcctgg aatcccgaca tgaggacaaa aatgggtactg aattcctttt 180
gaaaaataga ttactgaaaa gcgatctaata atagaacagt tgcttttact tagatgttca 240
atgcatattt gttgtataat aaccaagtta ttacagttca gataaagggt ccaaagtgtt 300
ttcgttatga tataataactt tctattgtaa actggactaa agaaacgttg tatgttcaag 360
gaagtgttga gcagccatgg tgttcctggg acatgctccc caggtgctga gagaggtgct 420
gcaggagtca cagacctgca ggcacgcact tgccagtgac tgggacgttg gctggtgggt 480
ctcttttgggt gtgattagag ntatgtgagt tgtntcaata cttgagantg tcg 533

<210> 43
<211> 676
<212> DNA
<213> Homo sapiens

<400> 43
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aaaaaaaaatc acagataagt acttaaaaca ctcaagattt gggattttaga tcatgattag 120
atacaataga aagatcctgg aatcccgaca tgaggacaaa aatgggtactg aattcctttt 180
gaaaaataga ttactgaaaa gcgatctaata atagaacagt tgcttttact tagatgttca 240
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acttacaatc atggtgaaag gcaaagggga agcaggtttg tcccataatt cttcgggcct 600
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 gagctgcatt acctaa 676

<210> 44
 <211> 251
 <212> DNA
 <213> Homo sapiens

<400> 44
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 taatgcacca tgcagtagac ttgctgtaaa gcacagtttc atcataacaa taactgtaaa 120
 taatgctact gaacagctac agagcactcc tctgaactca ctggaatggg ctatatccca 180
 tggcaagatg agtaagcctc aagcgcaaaa atctcaccct tgtttccctt tttttttggc 240
 agaaatcccg a 251

<210> 45
 <211> 606
 <212> DNA
 <213> Homo sapiens

<400> 45
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 cctaagctca gcaacttgcaa agaaatcttt tgggaagatc tcttcaaatg tctagaactc 180
 tgcgcaaaca ataggtagga caagtgtgaa cctacccaac ctctgttgac aaatacagct 240
 gcacaccct cagcgaggcc tgctgtgaaa tgccaccttg gtgaaaatga gaataaagg 300
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 ctgctcagca agattttcat gggattagtg aattgggtgt tgccaaatgc cataataatg 420
 caccatgcag tagacttgct gtaaagcaca gtttcatcat aacaataact gtaaataatg 480
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 agatgagtaa gcctcaagcg caaaaatctc acccttggtt cccttttttt ttggcagaaa 600
 tcccga 606

<210> 46
 <211> 455
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (14)
 <223> a, c, g or t

<220>

<221> unsure
<222> (16)
<223> a, c, g or t

<220>
<221> unsure
<222> (18)
<223> a, c, g or t

<400> 46
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aggaagagag tttcaaatca tgtgagagct agtcccaatg ccgtaaggag gaaatgggat 240
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atgaagccat ctggttaagt atttaaaagt tcatt 455

<210> 47
<211> 367
<212> DNA
<213> Homo sapiens

<400> 47
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tgtgtgccaa gaatacagac agcccaggca gagggcattc ggtgctccag acacaaagtg 180
aaggcccagc ttcaaattgtg gctggatcca ggcacacatc ctgaggttct gctgggtctg 240
actgctaacc cactcacgag gatccattct caagcagccc cagcctgtct cccacctgg 300
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tggggca 367

<210> 48
<211> 249
<212> DNA
<213> Homo sapiens

<400> 48
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gggcctgcc aaggaaataaa cttggttgag acaaaattct tgtaaataag ctcatagagg 180
ggacagactc ctgctccatt cctcccacc ctcacaaggt cttccaaatt agcggaaaac 240
agtctaaat 249

<210> 49
 <211> 436
 <212> DNA
 <213> Homo sapiens

<400> 49
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 ccaacctaac tacttgccat ttcccaaata catcgtgcag tgcctggtgt ctatcctgtg 180
 gttcatgctg cttcctctgc ctgcaatata ctttcctgc aatagcctct tccaccagc 240
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 gatgctgcag tcagatggag tgtctcctcc tgggccccca cagaccctgt acttccttct 360
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 ggatgccatg ttgctt 436

<210> 50
 <211> 853
 <212> DNA
 <213> Homo sapiens

<400> 50
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 gaagtctttt cactttcaat atgtgaagac cttaaattatg taattggatg aatgatattt 180
 gtagagtcaa agagaatgtg agttctccgt cttatgggta tagttattat gtaataatca 240
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 gaggctcaga gaggaagtaa aataaagcat ggctcccccc tactgggtta ctatattcca 420
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 ttctaaggag tcagtgttca aatcacagac atcagagatt tattatgata attttctgg 540
 cagatggcag taaagtagct tattctaaca aaattgggaa tataaagact attttctaac 600
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 tggactagca gaaagaatgg cgtcattgat gtccctttgt atgtgttacc cagtttaatc 720
 ctggggaatt ttactttttg ctggaaaagg agtcacccctc ccttgccaac cacatgtgtg 780
 gttatacatt ggtattgcag agtgatgcca tttacaagta atacatttga gttggcagat 840
 ttcccaaggc ttc 853

<210> 51
 <211> 383
 <212> DNA
 <213> Homo sapiens

<400> 51
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 gagagaaata ggggaagcagt gaaggtagat gtcatttctg ttttttagtgg tggaatacaa 120
 ggtgttcttg tgcttaaagg tcatgttctt gtgataaaac gcactgcaga gacaacatg 180

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aaatgtaatt	ttaaaaacca	ctctcattca	aatgtaagaa	tatcaaagca	cccttaactc	300
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<210> 52

<211> 3342

<212> DNA

<213> Homo sapiens

<400> 52

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gtgttcttgt	gcttaaagg	catgttcttg	tgataaaacg	cactgcagag	acaacatagt	180
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tggtgccatt	atgtgtcac	atgccactc	cctcaggttt	agaagtcgcg	ttgcccggca	360
acagaacaat	ctgctggctt	agcctttggc	caagttggca	gctggacgag	gacgctcaga	420
gcccagctct	tgagagttca	agtatccgac	agttccccac	tgctcccagg	agcggttacc	480
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cagggatgcc	tgagcagcac	aaggaccca	gagtccaaga	aaatcctgat	gatcagagaa	780
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accgctgtga	aaacaaggca	ggtacagcac	cagggcagac	acttgccccc	aggggtggct	2100
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gggactcagc ccaggacacc tcgctgattc ctgccccctt cacacctgca agcagggatg 3300
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<210> 53
<211> 129
<212> DNA
<213> Homo sapiens

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attcatttcc cataacaata ttattttctt aaatatgtta agctttaaaa taaaagcata 120
tcaaatgga 129

```

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<210> 54
<211> 201
<212> DNA
<213> Homo sapiens

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<400> 54
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tcgccccca gctgccgtcg gcgtcagtc acacacatag gcttttgggc ggtgctggaa 120
gcttctggcc cctgaacggt cccccaggc cccgtttcca gggaaaggga taggcaggcg 180
cacgtgcgg ccgtttccac a 201

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<210> 55
<211> 227
<212> DNA

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ggaagcagag cagtgcctctg accttcgctt ctggaaccga gaaaatgatg ccatgctgct 180
ttgttggtgt gattgttggt gggtttttgt ggatgaattt taaaatagta tttgtgacta 240
tcatttcctg tgtccactct ttttaaaaaat gttacctttt ctaggattgg cagaatttgg 300
aattatatgt cttattaaat atgctttgaa agacagaagt aataagttct ggtaaatctt 360
ttatagtgtt tgtcttgga gcaaatagta tgagagagag gtgtgagaat gggaataata 420
atctaacata tcaaaattag agaaccceaa accatcacat tctttctctt tgtgccattt 480
tagaattgag aataccgtcc ttcttactgt gggttatatt ttacttttgt atataaactt 540
gtagcagaaa ataagattca gtagcttaaa ggggccaggg actgtggctc atgcccgtaa 600
tcccagtggt ttagaaggct gaggggaagg atcacttgag gcctggagtt tgaaatcaac 660
ctgggcaaca tagcaagact ctgttccttc aaaaaaaaaa ttttaaaaat tagctgagca 720
tgagggtgca tgccataat cctagcaatg attataccat tacactccag cctggatgat 780
agagtgcac cctgtctcaa agagaaaaaa aaaaaaaaaa aattctgcgg cgcaagaatt 840
cgc 843

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<210> 59

<211> 221

<212> DNA

<213> Homo sapiens

<400> 59

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cgggactgga aggggtgtgcc ctgcgcgtcc tcgccttcgt cttgcacggg acaagatgtc 60
acgattccga atccaaacct cagagacagc ccccatccct ctgcgttagcc acccacacac 120
cccgtcagc aacaataaca acctgcattt agggaaactg tggtatgtgc caggccacac 180
aggcattatc tcatgtactc ctcacaggca cttatcaag g 221

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<210> 60

<211> 535

<212> DNA

<213> Homo sapiens

<400> 60

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gcacgtgggg tcgggggtggg ggcgaagggc cgcttggcct ctgtaggggc gggactggaa 60
gggtgtgccc tcgccgtcct cgccttcgtc ttgcacggga caagatgtca cgattccgaa 120
tccaaacctc agagacagcc cccatccctc tcgttagcca cccacacacc ccgctcagca 180
acaataaaca cctgcattta gggaaactgt gttatgtgcc aggccacaca ggcattatct 240
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ggggaaactg aggetcaatg cattaaggac tgccaggaag ccctgtcctg tggctgtgat 360
gatggaaatg ttccctgtgt tggtcagtat ggtagtcact ggccacaagt gagcactgga 420
aatgtgccta ttgagactga ggaactgatt ttttcatttt gtttaattgt aattaaacag 480
ttacgtgtgg ctgtggtatt ggaaaaaaaa aaacacaaaa aaaaaaaaaa aactc 535

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<210> 61

<211> 514

<212> DNA

<213> Homo sapiens

<400> 61

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catgtcattc ctttgcaaaa ctaagtttcc ctttgcactc aaaacaatat ctgaatgtct 120
tgctctgggt tctcaggccc cgctctacc actggcctca gctcttcccc tctctccatt 180
gctcactgaa taacagccac caagacctcc ttgccattgc tcaaacatgc aaggcctaca 240
cctgccacag ggcttgggca catgctattc catctgttta caatgcttgt ctccacatgg 300
ctacttcttt gtagcagttg gtctcagctc aaatgtcatg tccccaacca gcctacctaa 360
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tgttattatc cttcttgctc tagaatggaa gcctacgag ggcaagatat ttttctgtat 480
cggtcactgc tatagcttca acaccaagaa catg 514
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<210> 62

<211> 598

<212> DNA

<213> Homo sapiens

<400> 62

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aggaagcaat tgcatatcaa ttttcttcta ttccagctta atctatttat ttttctcttt 180
tacattaaaa cattctttta atgatatatg ctgcctgtaa atatttccca cccactttcc 240
agaggtaatc cactgttatt aagtaagttt agtaaathtt ttttaattga attttctcaa 300
taggtcatta acgtgtttca aagttgaaaa attacaaaac tatgtgtcgt gaaaagtctc 360
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tttgggtatt tttcagacac acatgggtatg cattatttga gcaaaggggc gtgggtgtgt 480
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<210> 63

<211> 648

<212> DNA

<213> Homo sapiens

<400> 63

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aagaaggaag caattgcata tcaattttct tctattccag cttaatctat ttatttttct 180
cttttacatt aaaacattct tttaatgata tatgtgcct gttaaatttt cccaccact 240
ttccagaggt aatccactgt tatcaagtaa gtttagtaaa ttttttttaa ttgaattttc 300
tcaataggtc attaacgtgt ttcaaagttg aaaaattaca aaactatgtg tcgtgaaaag 360
tctccttctt tcccttgtgt cccaagctac ctagtctctg gagccagttg atgttatcag 420
attcttttgt attctttcag acacacatgg tatgcatttt tgagcaaagg ggcgtgggtg 480
tgtgtccctc tgtttttaag ttctaaatgt tagcatgcta cacatacttt tttcatatat 540
tttcttaagt aactttatct cattatttgt attcagtttt gtaaaattag atactacatg 600
catgtgggtc aaaagtaaaa tgatgtaaa gctaataata tgtaatag 648
```

<213> Homo sapiens

<400> 55

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cttctggccc ctgaacgttc cccccaggcc cgtttccag ggaaagggat aggcaggcgc 180
acgctgcggc cgtttccaca atccgacctc gtagctgggg cgtgccg 227
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<210> 56

<211> 271

<212> DNA

<213> Homo sapiens

<400> 56

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catcttttta atattcagta tgaccgaata aagcactggg gctgccttag taacaatggg 60
tgtntcaag gtaaacttct catgtgcttg tttcagttgt gagctcaatt agcctcttct 120
tcatgaaatg aatgcctttt tacttgaaag aatgactgag agccaggcta tggatattca 180
aacatgtatt tttcagacac ttcttgaaaa taagtgaagc aaacctgtta attacaaggg 240
aagcaatgac aatatttgtt gccaatgata a 271
```

<210> 57

<211> 573

<212> DNA

<213> Homo sapiens

<400> 57

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aatctaacat atcaaaatta gagaaccca aaccatcaca ttctttctct ttgtgccatt 480
ttagaattga gaataccgtc cttcttactg tggttatatt tttacttttg tatataaact 540
tgtagcagaa aataagattc agtagcttaa agg 573
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<210> 58

<211> 843

<212> DNA

<213> Homo sapiens

<400> 58

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gagtgcacat ctcttgcccc acaaatgtgt ttgcacacta aggtgatggc atccttagaa 120
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<210> 64
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 64
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 tttgaagatt ctttatttga gagtggacct gcacacctag tgttctggg tcagtccagg 180
 ggcgagcaga tcattgaagg actgcacctt tctctaggc tcaccaaata cccaggtgta 240
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 gcaactgaatg aggaccagca ggaagagatc tcagaaaaca taagataatg gacttggtga 360
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 tgaaaagttc atgtctttat aataaaaaatc taacagatgg atttactagc agattacata 540
 aaactgaaga gagtgaatga cctggaaagt agagaagaag aaatataatt tagagaacca 600
 c 601

<210> 65
 <211> 1216
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (58)..(125)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (1204)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (1206)
 <223> a, c, g or t

<400> 65
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gctactgggt	atttgatgat	aagagccaag	gatgagggca	atagaaaatt	aaaatcatgt	660
tctactcata	taaactgcac	agatatggaa	gggtagggtc	tattacctat	aatcctggga	720
tttttagact	ctcactttca	ttggaccaga	gttgcccttag	ggacagtaaa	aacacaaaat	780
gctgggtatt	gttttcatca	agcaactact	gatagtgcac	attttaaata	aaattcttct	840
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aaangnataa	aaataa					1216

<210> 66

<211> 1430

<212> DNA

<213> Homo sapiens

<400> 66

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taaataatca	atggcaaaact	tctggcatgg	gagagacatt	tagggaaaga	agtcactctca	1380
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<210> 67
 <211> 430
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (72)..(139)
 <223> a, c, g or t

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 tgaagacact tcatgtcca ctatgtactt acctctgaaa cgaagggtg acccagatca 300
 gttgttctct gacctgcttg gagggactca gaggtgtgg agactgtggc cctccttggc 360
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 gaggaactgt 430

<210> 68
 <211> 829
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (240)..(354)
 <223> a, c, g or t

<400> 68
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 tttttgtaat atgtaccttt atgctaattt ttaatatgca aataacttac aaatatatgc 180
 tcagcatttg agtacaggct gtgctttatt acatattaca tgcattgtatg caatgtactn 240
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnacaaaa 360
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<210> 69
 <211> 541
 <212> DNA
 <213> Homo sapiens

<400> 69
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 agatcctaac agagtgcac ttgtgctttt cctaacagac ctgtcggact ggctttttct 180
 cttttaagga tatagagaaa gcaaaattag caaatctagt ttcttgtcac tttactagga 240
 gggaggaaaa gagagaaaga atgcacttgg gaatgggagg ccttgctttt aatttaccag 300
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 gactgttgca gcctctttct gcgactccag acatgcgatg tctgttagct gattctagcc 420
 ttcagatgca gcccggagat gtaaccctga ggctggagtc ctgtggctct aatcccagac 480
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 a 541

<210> 70
 <211> 696
 <212> DNA
 <213> Homo sapiens

<400> 70
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 agatcctaac agagtgcac ttgtgctttt cctaacagac ctgtcggact ggctttttct 180
 cttttaagga tatagagaaa gcaaaattag caaatctagt ttcttgtcac tttactagga 240
 gggaggaaaa gagagaaaga atgcacttgg gaatgggagg ccttgctttt aatttaccag 300
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 gactgttgca gcctctttct gcgactccag acatgcgatg tctgttagct gattctagcc 420
 ttcagatgca gcccggagat gtaaccctga ggctggagtc ctgtggctct aatcccagac 480
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<210> 71
 <211> 1207
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (957)
 <223> a, c, g or t

<400> 71

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<210> 72

<211> 263

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (231)

<223> a, c, g or t

<220>

<221> unsure

<222> (239)

<223> a, c, g or t

<220>

<221> unsure

<222> (242)

<223> a, c, g or t

<220>

<221> unsure

<222> (248)

<223> a, c, g or t

<220>

<221> unsure

<222> (259)

<223> a, c, g or t

<400> 72

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atcttctttc cttggtttct gaaatactgt tatcttcccta tctcactggc catacattct 180
agtctccttt gctagtttat tatggttttc atcttctcaa caacaatttt ntttttttng 240
gnggagangg agtcttgcna tgt 263
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<210> 73

<211> 579

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (547)

<223> a, c, g or t

<220>

<221> unsure

<222> (555)

<223> a, c, g or t

<220>

<221> unsure

<222> (558)

<223> a, c, g or t

<220>

<221> unsure

<222> (564)

<223> a, c, g or t

<220>

<221> unsure

<222> (575)

<223> a, c, g or t

<400> 73

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gtaaatgcag acaaagttgg aattgaagct gccgaaatgc tattagcaaa tcttagacat 180
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 tctaacctgt tagatttgaa tatgtggtag attgaatata aatttaaata attgactttc 300
 agacactaat tagcaagtcc tacttcaata atttaaaaaa atattctggg atttgcattc 360
 ctcaaatttc agccctcatt ttactttacc tgtctacagt gttttgcgca attgaccact 420
 ccttcctttt tgaagtattt tctttccttg gtttctgaaa tactgttata ttcctatctc 480
 actggccata cattctagtc tcctttgcta gtttattatg gttttcatct tctcaacaac 540
 aattttnttt ttttnggngg aganggagtc ttgcnatgt 579

<210> 74

<211> 339

<212> DNA

<213> Homo sapiens

<400> 74

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 actttccatt gtgtataaga taacgataat catagaatta atattattca acttccttgt 180
 gtcttttgca catttctgta cagtcctgtt tttgtttgtt actgtcattc tcaaagtact 240
 caagttgaat tttgtcactt tggatttctt ccaggaatat gtgagagaca tttaggtctc 300
 taatgatgaa gtatttttcta ggcgtaatgc aaaagattg 339

<210> 75

<211> 299

<212> DNA

<213> Homo sapiens

<400> 75

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 ctcacattca ccatcttgag aagtgcagta agccacataa atgcagcaga agtaccttat 240
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<210> 76

<211> 247

<212> DNA

<213> Homo sapiens

<400> 76

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 gaaatggagg ctcagaggga tatgtagtag ctaaatgtta gagctaggat tganacccaa 180
 attgacttct gagtatagat ttcccccaa ctgtatgata cttcatattt ggagtcagct 240
 tgaagta 247

<210> 77
<211> 254
<212> DNA
<213> Homo sapiens

<400> 77
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tgaaatggag gctcagaggg atatgtagta gctaaatggt agagctagga ttgaaacca 180
aattgacttc tgagtataga tttcccccca actgtatgat acttcatatt tggagtcagc 240
ttgaagtaat tcac 254

<210> 78
<211> 504
<212> DNA
<213> Homo sapiens

<400> 78
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acaatactaa gaattccatt ctttagagac aaattactta gaagttgata gtgacatatt 120
gaaagggttg ttgattgttg gattattcag gtgatgaaga tgatggtagg ggccatggcg 180
gctgagggag aatgagtctt aaacactgag gaggcacaaa agattgggtg gctggatata 240
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aagaagatgt gtggaaaaga aagtttctact ttgaaggctt gatttttgaa gtgatggcag 360
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gtaacagtgg caggttttgt tttt 504

<210> 79
<211> 210
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (80)..(99)
<223> a, c, g or t

<220>
<221> unsure
<222> (173)
<223> a, c, g or t

<220>

<221> unsure
<222> (175)
<223> a, c, g or t

<220>
<221> unsure
<222> (206)
<223> a, c, g or t

<400> 79
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gaccgtggta ttggataggg gtccacccta cttcgatatg accttatatt aantncatct 180
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<210> 80
<211> 161
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (116)
<223> a, c, g or t

<220>
<221> unsure
<222> (148)
<223> a, c, g or t

<400> 80
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gattcttccc cagaatccct ggaaaggnac gtggccctaa c 161

<210> 81
<211> 112
<212> DNA
<213> Homo sapiens

<400> 81
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<210> 82

<211> 277
<212> DNA
<213> Homo sapiens

<400> 82
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aaaatataat tctaaaaata ttcaagtagc caattggaag gtggaaaaaa gaaaaagaac 180
aaaaaataga acagcactaa acaaaaaata aaatcgcaga cctaggccct gacatatcaa 240
taattatatt aacatgtaaa tgggtctaat tttacca 277

<210> 83
<211> 637
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (92)..(196)
<223> a, c, g or t

<220>
<221> unsure
<222> (230)..(316)
<223> a, c, g or t

<220>
<221> unsure
<222> (367)..(428)
<223> a, c, g or t

<400> 83
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aattggggag ttcataagggt ttgatagtgt acaatacag agtgtagtat taggtagggg 600
ttttttggca ggggtgcagtg gcccatacct gtaatgt 637

<210> 84
<211> 577

<212> DNA
<213> Homo sapiens

<400> 84
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ggcagcatgc tttggctgct cagtgaagta tgttctgtac aaccaagtga aattgctaaa 180
aaaagattct cctgtatata gtaacttaaa gtgatgcagt ctacttaaga tcagatctga 240
gttacaaaat caaaagtgc agtcctatg ttctttttaa gtccaatctc tttttttcat 300
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gaatttcttg aacgaatctg ttatgaaaag atctactttg ctcatctctg tgccccaata 420
gcaggagctt gaggagaagg agaaaatatt gggtcagagc ttttgattaa tatgtatgat 480
tctattaaac gggttcacta aaccaaaaaa ggcaaggaaa acagttaaac caagagtctt 540
gaggttcaag tcttgtgatg attaaatcat catccta 577

<210> 85
<211> 687
<212> DNA
<213> Homo sapiens

<400> 85
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ctttgaacac aagcaaatat actttggaga aaaatttaaat aatcctggca gggctacatt 180
caacataatt ctgttatggg ggaaggcagc atgctttggc tgctcagtga gctatgttct 240
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tttgctcacc tctgtgcccc aatagcagga gcttgaggag aaggagaaaa tattgggtca 540
gagcttttga ttaatatgta tgattctatt aaacgggttc actaaaccaa aaaaggcaaa 600
ggaaaacagt taaaccaaga gttcttgagg ttaaagtctt gtgatgatta aaatcatcat 660
cctaagatga tgatgacata aactttc 687

<210> 86
<211> 77
<212> DNA
<213> Homo sapiens

<400> 86
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cttgcattga catcccc 77

<210> 87
<211> 575

<212> DNA
<213> Homo sapiens

<400> 87
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ttgtctgact ttccaagctt tattaggcat caaacaaaac tgaagtgcct tttaagattc 180
aagtctccta cgctcgtcta ggagagagta gtagccttca gtactataatt ttactctaatt 240
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ggcagcaaaa ttacctgtaa aaacatacta gctcaagagt ttgacaggct caaaaataaat 420
tacctttaat acattaaaca agaagtgtat ttgttataca gtatgtactg accaaaatta 480
aagtgcagggt tgtacagaaa gagctgcttg tgttatttta tgagcaaat gaaaagctaa 540
tttggtagat ttaaaaatca gcatctagca aattc 575

<210> 88
<211> 663
<212> DNA
<213> Homo sapiens

<400> 88
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aacattttaat ttattgaaca tttattatat gccaaagctg gtataagaca ccaaagagt 180
aagacagaaa gtattcttcc ctggagcttt gtctgacttt ccaagcttta ttaggcatca 240
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<213> Homo sapiens

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<211> 496

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<211> 364
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<210> 94
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 <211> 516
 <212> DNA
 <213> Homo sapiens

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 <211> 400
 <212> DNA
 <213> Homo sapiens

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<210> 99
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 <213> Homo sapiens

<400> 99

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 <213> Homo sapiens

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<210> 102
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<210> 103
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<213> Homo sapiens

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<211> 49
<212> PRT
<213> Homo sapiens

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Cys

<210> 106
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<212> PRT
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Glu Cys Asn Gln Ser Lys Thr Pro Leu Lys Lys Asn Lys
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<210> 107
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 <212> PRT
 <213> Homo sapiens

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Glu Ser

<210> 108
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 <213> Homo sapiens

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Tyr Lys Lys Gln Asp Ile Leu Pro Gln Leu Arg Ser Asp Lys Ile Thr
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Leu Gly Lys Leu Gln Gly Gln Cys Ala Ser Lys Thr Lys Ser Leu Val
 35 40 45

Ser Ser Leu Thr Ser Tyr Leu Pro Ala Phe Ile Ile Ile Ser Leu Ser
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<212> PRT

<213> Homo sapiens

<400> 109

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20 25 30

Gln Ala His Ser Ile Thr Arg Leu Ser His Ile Gly Val Phe His Phe
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Gly Asp Glu Asp Glu Gly Glu Ser Gly Arg Glu
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<210> 110

<211> 91

<212> PRT

<213> Homo sapiens

<400> 110

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20 25 30

Leu Ala Ile Met Ile Pro Pro Asn Leu Ser Gln Phe Val Tyr Phe Ile
35 40 45

Ser Arg Gly Ser Phe Ser Val Leu Ala Ser Cys Val Phe Val Phe Phe
50 55 60

Phe Phe Ser Val Ile Leu Gln Ala Gln Asp Phe Leu Leu Asp Thr Gly
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Arg Ile Ser Leu Leu Lys Glu Ala Gly Gly Thr
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<210> 111

<211> 45

<212> PRT

<213> Homo sapiens

<400> 111

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 20 25 30

Ser Leu Trp Arg His Asn Pro Asn Cys Glu Leu Leu Asn
 35 40 45

<210> 112
 <211> 64
 <212> PRT
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 20 25 30

Phe Ser Gln Ser Phe Leu Leu Ala Phe Leu Ser Asn Arg Val Leu Leu
 35 40 45

Thr Pro Tyr Ile Pro Phe Trp Leu Val Arg Val Ser Phe Ser Ser Ser
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Xaa Asn Asn Lys Leu Leu Gln Leu Phe
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<212> PRT
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Pro Ser Val Lys Trp Lys Arg Glu Glu
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20 25 30

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35 40 45

Gly Met Ala Leu Gly Leu Gly Leu Val Gly Thr Ala Ala Thr Arg Gly
50 55 60

Gly Ser Ser Ala Trp Pro Asp Ser Thr Cys Asn Val Gly Arg Gln Trp
65 70 75 80

Ala Pro Pro Gly Gly Arg Asn Thr Val Arg Ser Met Gln Arg Ala Gly
85 90 95

Asp His Gly Ala Cys Asp Leu Arg Ala His Pro Gly Gln Thr Trp Val
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Arg Gly Gly Leu Gly Arg Gln Asp Ser Glu Gly Leu Gln Gly Val Phe
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Arg Met Leu
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<210> 116
 <211> 73
 <212> PRT
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Pro His Leu Pro Ser Gln Pro Gln His Pro Leu Leu Phe Phe Gln Ala
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Gly Gly Lys Leu Glu Ala His Pro His Phe Thr Gln Thr Leu Gly Ile
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Pro Ile Ser Gly Asn Arg Gly Val Phe
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<210> 117
 <211> 48
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (46)

<400> 117
 Met Tyr Asn Ile Leu Lys Ala Phe Asp Lys Ile Val His Ile Ile Ser
 1 5 10 15

Asn Thr Ile Leu Tyr Tyr Tyr Gln Gln His Lys Ala Asn Val Ser Lys
 20 25 30

Asn Ser Arg Leu Arg Ile Ser Lys Asn Ser Pro Arg Ala Xaa Phe Arg
 35 40 45

<210> 118
 <211> 38
 <212> PRT
 <213> Homo sapiens

<400> 118
 Met Leu Pro Val Ser Pro Thr Leu Lys Glu Arg Asn Gln Arg Arg Met
 1 5 10 15

Leu Leu Lys Ser Thr His Leu Ala Ser Val Ser Ser Ala Ser Cys Thr
 20 25 30

Gln Thr Lys His Thr Gly
 35

<210> 119
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 119
 Met Lys Ile Phe Ile Ile Ile Leu Ser Pro Leu Cys Gly Ile Leu Leu
 1 5 10 15

Asn Val Leu Glu Ser Leu Lys Phe Ile Phe Lys Cys Glu Ser Leu Leu
 20 25 30

Phe Val Trp Gly Glu Glu Cys Gln Val Gly Ile Met Asn Gln Ala Leu
 35 40 45

Pro Tyr Gln Val Leu Leu Tyr
 50 55

<210> 120
 <211> 92
 <212> PRT

<213> Homo sapiens

<400> 120

Glu Ser His Thr Leu Gln Val Ile Leu Gly Cys Glu Met Gln Glu Asp
1 5 10 15

Asn Ser Thr Glu Gly Tyr Trp Lys Tyr Gly Tyr Asp Gly Gln Asp His
20 25 30

Leu Glu Phe Cys Pro Asp Thr Leu Asp Trp Arg Ala Ala Glu Pro Arg
35 40 45

Ala Trp Pro Thr Lys Leu Glu Trp Glu Arg His Lys Ile Arg Ala Arg
50 55 60

Gln Asn Arg Ala Tyr Leu Glu Arg Asp Cys Pro Ala Gln Leu Gln Gln
65 70 75 80

Leu Leu Glu Leu Gly Arg Gly Val Leu Asp Gln Gln
85 90

<210> 121

<211> 85

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (51)..(72)

<400> 121

Met Ile Lys Val Ser Leu Thr Ser Ala Pro Lys Val Ser Ser Leu Glu
1 5 10 15

Gly Thr Asn Arg Arg Glu His Ser Asp Thr Gln Gly Pro Leu Ser Val
20 25 30

Pro Trp Lys Pro Ser Asp Leu Cys Arg Pro Ile Ser Val Arg Lys Trp
35 40 45

Val Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
50 55 60

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Thr Thr Gln Ser Ser Trp Gln
65 70 75 80

Ile Leu Asn Lys Gly

<210> 122
 <211> 20
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (15)

<400> 122
 Met Gly Gly Ala Trp Ser Ile Ala Gly Pro Leu Thr Gly Phe Xaa Phe
 1 5 10 15
 Arg Leu Thr Phe
 20

<210> 123
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 123
 Phe Tyr Phe Leu Phe Ser Phe Val Leu Arg Trp Ser Phe Thr Leu Val
 1 5 10 15
 Thr Gln Ala Gly Val Gln Trp Cys Asp Leu Gly Ser Leu Gln Pro Pro
 20 25 30
 Pro Pro Arg Leu Lys Ala Phe Ser Cys Leu Gly Leu Pro Ser Ser Trp
 35 40 45
 Asp Tyr Arg His Ala Leu Gln Arg Pro Ala Asn Phe Ala Phe Leu Val
 50 55 60
 Glu Ile Gly Phe His His Val Gly Gln Ala Gly Pro Gln Leu Leu Thr
 65 70 75 80
 Ser Gly Asp Pro Ser Ile Leu Ala Ser Gln Ser Ala Gly Ile Thr Gly
 85 90 95
 Val Thr Ala Val Pro Gly Pro
 100

<210> 124
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (13)..(43)

<400> 124
Met Val Val Ile Gln Ala Xaa Glu Glu Glu Lys Thr Xaa Xaa Xaa Xaa
1 5 10 15
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
20 25 30
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ile Trp Lys Ile Cys
35 40 45

<210> 125
<211> 95
<212> PRT
<213> Homo sapiens

<400> 125
Met Ser Ser Tyr Met Ile Asn Lys Phe Leu Pro Ile Lys Lys Val Lys
1 5 10 15
Ile Pro Gly His Lys Val Phe Ser Thr Asp Ile Met Phe Leu Lys Phe
20 25 30
Val Ser Ile Ala Thr Leu Leu Arg Arg His Thr Asp Ile Ser Glu Asp
35 40 45
Leu Arg Val Leu Gln Asn Thr Glu Lys Ile Ser Arg Arg Lys Gly Lys
50 55 60
Gly Glu Thr Lys Lys Leu Lys Glu Gly Leu Thr Tyr Lys Trp Asn Asp
65 70 75 80
Leu Lys Arg Asn Gly Glu Pro Gly Glu Thr Gly Val Ser Gln Ser
85 90 95

<210> 126
<211> 48
<212> PRT
<213> Homo sapiens

<400> 126
Met Ile Lys Tyr Phe Lys Ser Asn Asn Tyr Lys Phe Asn Tyr Tyr Lys
1 5 10 15
Thr Ser Ser Leu Thr Ser Asp Cys Phe Val Leu Ser Phe Lys Ile Ile
20 25 30
Met Val Cys Leu Arg Val Cys Leu Leu Asn Thr Phe Ala Tyr Leu Pro
35 40 45

<210> 127
<211> 98
<212> PRT
<213> Homo sapiens

<400> 127
Met Glu Phe Arg Ser Val Ala Gln Val Gly Val Gln Trp Arg Asp Leu
1 5 10 15
Gly Leu Leu Gln Pro Leu Pro Leu Gln Phe Lys Gln Phe Tyr Cys Leu
20 25 30
Ser Leu Ser Ser Ser Trp Asp Tyr Arg His Ser Pro Pro His Pro Ala
35 40 45
Asn Phe Leu Tyr Phe Ala Lys Ile Leu Tyr Ile Ala Lys Arg Phe His
50 55 60
His Val Gly Gln Ala Gly Leu Ala Leu Leu Thr Ser Gly Asp Pro Pro
65 70 75 80
Thr Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Leu Ser His Cys Ala
85 90 95
Gln Pro

<210> 128

<211> 50
<212> PRT
<213> Homo sapiens

<400> 128
Met Gly Lys Arg Arg Asp Ser Trp Thr Asn Arg Glu Arg Gln Leu Glu
1 5 10 15
Asn Lys Ser Met Gln Lys Ile Ile Tyr Asn Lys Ile Met His Leu Thr
20 25 30
Leu Val Thr Lys Gln Ile Ser Tyr Pro His Phe Ser Leu Ser Val Phe
35 40 45
Val Ser
50

<210> 129
<211> 16
<212> PRT
<213> Homo sapiens

<400> 129
Met Leu Leu Phe Val Leu Ser Leu Val Phe Gln Tyr Gln Phe Asn Thr
1 5 10 15

<210> 130
<211> 54
<212> PRT
<213> Homo sapiens

<400> 130
Met Ala Leu His Cys Phe Thr Ser Gly Leu Trp Ile Ala Ser Val Arg
1 5 10 15
Lys Lys Val Lys Met Lys Glu Lys Val Glu Gln Ile Leu Ala Thr Glu
20 25 30
Pro Pro Glu Asp Ser Cys Pro Phe Ser Asn Lys Leu Ser Gly Lys Cys
35 40 45
Cys Cys His Gly Ser Thr
50

<210> 131

<211> 41
<212> PRT
<213> Homo sapiens

<400> 131
Met Cys Ala His Lys Gly Lys Ala Met Arg Glu Arg Thr Gln Pro Glu
1 5 10 15
Gly Gly His Leu Ala Ser Gln Gly Glu Ala Leu Arg Glu Thr Lys Pro
20 25 30
Ala Arg Leu Gly Thr Val Ala His Gly
35 40

<210> 132
<211> 35
<212> PRT
<213> Homo sapiens

<400> 132
Met Ala Leu Ile Leu Leu Glu Ala Leu Cys Phe Gly Leu Ile Ile Cys
1 5 10 15
Met Asn Arg Glu Ser Ile Ser Thr Leu Ile Phe Tyr Lys His Trp Met
20 25 30
Ser Ile Leu
35

<210> 133
<211> 58
<212> PRT
<213> Homo sapiens

<400> 133
Met Phe Asn Ala Tyr Leu Leu Tyr Asn Asn Gln Val Ile Thr Val Gln
1 5 10 15
Ile Lys Gly Pro Lys Cys Phe Arg Tyr Asp Ile Ile Leu Ser Ile Val
20 25 30
Asn Trp Thr Lys Glu Thr Leu Tyr Val Gln Gly Ser Val Glu Gln Pro
35 40 45
Trp Cys Ser Trp Asp Met Leu Pro Arg Cys
50 55

<210> 134
<211> 27
<212> PRT
<213> Homo sapiens

<400> 134
Met Met Lys Leu Cys Phe Thr Ala Ser Leu Leu His Gly Ala Leu Leu
1 5 10 15

Trp His Leu Ala Thr Thr Asn Ser Leu Ile Pro
20 25

<210> 135
<211> 46
<212> PRT
<213> Homo sapiens

<400> 135
Met Glu Leu Pro Ser Met Cys Pro Ile Leu Phe Phe Val Thr Val Phe
1 5 10 15

Phe Met Tyr His Thr Pro Ser Cys Pro Ser Ser Val Pro Gln Thr His
20 25 30

Gln Ser His Phe Leu Leu Thr Ala Leu Gly Leu Ala Leu Thr
35 40 45

<210> 136
<211> 77
<212> PRT
<213> Homo sapiens

<400> 136
Met Thr Cys Pro Gly Gly Glu Thr Gly Trp Gly Cys Leu Arg Met Asp
1 5 10 15

Pro Arg Glu Trp Val Ser Ser Pro Asp Gln Gln Asn Leu Arg Met Cys
20 25 30

Ala Trp Ile Gln Pro His Leu Lys Leu Gly Leu His Phe Val Ser Gly
35 40 45

Ala Pro Asn Ala Leu Cys Leu Gly Cys Leu Tyr Ser Trp His Thr Gly
50 55 60

Glu Ala Leu Ser Pro Ala Gly Pro Gly Cys Cys Cys Ser
65 70 75

<210> 137
<211> 37
<212> PRT
<213> Homo sapiens

<400> 137
Met Glu Gln Glu Ser Val Pro Ser Met Ser Leu Phe Thr Arg Ile Leu
1 5 10 15

Ser Gln Pro Ser Leu Phe Pro Trp Gln Ala Leu His Arg Glu Thr Gly
20 25 30

Lys Arg Ser Thr Val
35

<210> 138
<211> 59
<212> PRT
<213> Homo sapiens

<400> 138
Met Leu Leu Pro Leu Pro Ala Ile Ser Phe Pro Cys Asn Ser Leu Phe
1 5 10 15

His Pro Ala Asp Ala Ser Ser Leu Ser Trp Leu Ser Ser Lys Ser Tyr
20 25 30

Pro Leu Gly Lys Leu Thr Arg Met Leu Gln Ser Asp Gly Val Ser Pro
35 40 45

Pro Gly Pro Pro Gln Thr Leu Tyr Phe Leu Leu
50 55

<210> 139
<211> 50
<212> PRT
<213> Homo sapiens

<400> 139
Met Asp Asn Lys Cys Leu Thr Leu Thr Asn Tyr Leu Ala Ile Met Gly
1 5 10 15

Phe Phe Asp Gln Lys Ser Ser Lys Arg Val Trp Trp Gly Leu Arg Asp
 20 25 30

Pro Ser Ser Leu Pro Lys Asn Met Lys Ser Phe His Phe Gln Tyr Val
 35 40 45

Lys Thr
 50

<210> 140
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 140
 Met Arg Val Val Phe Lys Ile Thr Phe Cys Arg Val Val Cys Ser Thr
 1 5 10 15

Leu Met Leu Lys Gly Ser His Leu Pro Gln Pro Ile Lys Leu Cys Cys
 20 25 30

Leu Cys Ser Ala Phe Tyr His Lys Asn Met Thr Phe Lys His Lys Asn
 35 40 45

Thr Leu Tyr Ser Thr Thr Lys Asn Arg Asn Asp Ile Tyr Leu His Cys
 50 55 60

Phe Pro Ile Ser Leu His Leu Tyr
 65 70

<210> 141
 <211> 863
 <212> PRT
 <213> Homo sapiens

<400> 141
 Met Pro Glu Gln His Lys Asp Pro Arg Val Gln Glu Asn Pro Asp Asp
 1 5 10 15

Gln Arg Thr Val Pro Glu Val Thr Gly Asp Ala Arg Ser Ala Phe Trp
 20 25 30

Pro Leu Arg Asp Asn Gly Gly Pro Ser Pro Phe Val Pro Arg Pro Gly
 35 40 45

Pro	Leu	Gln	Thr	Asp	Leu	His	Ala	Gln	Ser	Ser	Glu	Ile	Arg	Tyr	Asn	50	55	60
His	Thr	Ser	Gln	Thr	Ser	Trp	Thr	Ser	Ser	Ser	Thr	Lys	Arg	Asn	Ala	65	70	75
Ile	Ser	Ser	Ser	Tyr	Ser	Ser	Thr	Gly	Gly	Leu	Pro	Gly	Leu	Lys	Gln	85	90	95
Arg	Arg	Gly	Pro	Ala	Ser	Ser	Arg	Cys	Gln	Leu	Thr	Leu	Ser	Tyr	Ser	100	105	110
Lys	Thr	Val	Ser	Glu	Asp	Arg	Pro	Gln	Ala	Val	Ser	Ser	Gly	His	Thr	115	120	125
Arg	Cys	Glu	Lys	Gly	Ala	Asp	Thr	Ser	Pro	Gly	Gln	Thr	Ile	Ala	Pro	130	135	140
Thr	Gly	Gly	Ser	Pro	Arg	Ser	His	Asp	Ser	Arg	Pro	Arg	Arg	Arg	Lys	145	150	155
Ile	Pro	Leu	Leu	Pro	Arg	Arg	Arg	Gly	Glu	Pro	Leu	Met	Leu	Pro	Pro	165	170	175
Pro	Leu	Glu	Leu	Gly	Tyr	Arg	Val	Thr	Ala	Glu	Asp	Leu	His	Leu	Glu	180	185	190
Lys	Glu	Thr	Ala	Phe	Gln	Arg	Ile	Asn	Ser	Ala	Leu	His	Val	Glu	Asp	195	200	205
Lys	Ala	Ile	Pro	Asp	Cys	Arg	Pro	Ser	Arg	Pro	Ser	His	Thr	Leu	Ser	210	215	220
Ser	Leu	Ala	Thr	Gly	Ala	Ser	Gly	Gly	Pro	Pro	Val	Ser	Lys	Ala	Pro	225	230	235
Thr	Met	Asp	Ala	Gln	Gln	Asp	Arg	Pro	Lys	Ser	Gln	Asp	Cys	Leu	Gly	245	250	255
Leu	Val	Ala	Pro	Leu	Ala	Ser	Ala	Ala	Glu	Val	Pro	Ala	Thr	Ala	Pro	260	265	270
Val	Ser	Gly	Lys	Lys	His	Arg	Pro	Pro	Gly	Pro	Leu	Phe	Ser	Ser	Ser	275	280	285
Asp	Pro	Leu	Pro	Ala	Asn	Ser	Ser	His	Ser	Arg	Asp	Ser	Ala	Gln	Val	290	295	300

Thr	Ser	Met	Ile	Pro	Ala	Pro	Phe	Thr	Ala	Ala	Ser	Arg	Asp	Ala	Gly	305	310	315	320
Met	Arg	Arg	Thr	Arg	Ser	Ala	Pro	Ala	Ala	Ala	Ala	Ala	Ala	Pro	Pro	325	330	335	
Pro	Ser	Thr	Leu	Asn	Pro	Thr	Ser	Gly	Ser	Leu	Leu	Asn	Ala	Val	Asp	340	345	350	
Gly	Gly	Pro	Ser	His	Phe	Leu	Ala	Ser	Ala	Thr	Ala	Ala	Ala	Arg	Ala	355	360	365	
Gln	Arg	Ser	Glu	Val	Arg	Tyr	Asn	Gln	Arg	Ser	Gln	Thr	Ser	Arg	Thr	370	375	380	
Arg	Ser	Cys	Leu	Lys	Arg	Asn	Ala	Ser	Ser	Ser	Ser	His	Ser	Ser	Thr	385	390	395	400
Glu	Gly	Leu	Gln	Glu	Val	Lys	Arg	Arg	Arg	Gly	Pro	Ala	Ser	Ser	His	405	410	415	
Cys	Gln	Leu	Ala	His	Ser	Ser	Ser	Asn	Thr	Val	Ser	Glu	Asp	Gly	Pro	420	425	430	
Gln	Ala	Val	Ser	Ser	Gly	His	Arg	Cys	Glu	Asn	Lys	Ala	Gly	Thr	Ala	435	440	445	
Pro	Gly	Gln	Thr	Leu	Ala	Pro	Arg	Gly	Gly	Ser	Pro	Arg	Ser	Gln	Ala	450	455	460	
Ser	Arg	Pro	His	Ile	Asn	Thr	Ala	Leu	His	Val	Glu	Asp	Lys	Ala	Ile	465	470	475	480
Ser	Asp	Cys	Arg	Pro	Ser	Arg	Pro	Ser	His	Thr	Leu	Ser	Ser	Leu	Ala	485	490	495	
Thr	Gly	Ala	Ser	Gly	Gly	Pro	Pro	Val	Ser	Lys	Ala	Pro	Thr	Met	Asp	500	505	510	
Ala	Gln	Gln	Asp	Arg	Pro	Lys	Ser	Gln	Asp	Ser	Leu	Gly	Leu	Leu	Ala	515	520	525	
Pro	Leu	Ala	Ser	Ala	Ala	Glu	Val	Pro	Ser	Thr	Ala	Pro	Val	Ser	Gly	530	535	540	
Lys	Lys	His	Arg	Pro	Pro	Gly	Pro	Leu	Phe	Ser	Ser	Ser	Asp	Pro	Leu	545	550	555	560

Pro	Ala	Thr	Ser	Tyr	His	Ser	Arg	Asp	Thr	Ala	Gln	Val	Thr	Ser	Leu	565	570	575	
Ile	Pro	Ala	Thr	Phe	Thr	Ala	Ala	Ser	Arg	Asp	Ala	Gly	Met	Arg	Arg	580	585	590	
Thr	Arg	Ser	Ala	Pro	Ala	Ala	Ala	Thr	Ala	Ala	Pro	Pro	Pro	Ser	Thr	595	600	605	
Leu	Asn	Asn	Thr	Ser	Gly	Ser	Leu	Leu	Asn	Ala	Val	Asp	Gly	Gly	Pro	610	615	620	
Ser	His	Phe	Leu	Ala	Ser	Ala	Thr	Ala	Ala	Ala	Arg	Ala	Gln	Arg	Ser	625	630	635	640
Glu	Val	Arg	Tyr	Asn	Gln	Arg	Ser	Gln	Thr	Ser	Arg	Thr	Arg	Ser	Cys	645	650	655	
Leu	Lys	Arg	Asn	Ala	Ser	Ser	Ser	Ser	Ser	Ser	His	Ser	Ser	Thr	Glu	660	665	670	
Gly	Leu	Gln	Glu	Val	Lys	Arg	Arg	Arg	Gly	Pro	Ala	Ser	Ser	His	Cys	675	680	685	
Gln	Leu	Ala	His	Ser	Ser	Ser	Asn	Thr	Val	Ser	Glu	Asp	Gly	Pro	Gln	690	695	700	
Ala	Val	Ser	Ser	Gly	His	Arg	Cys	Glu	Asn	Lys	Ala	Gly	Thr	Ala	Pro	705	710	715	720
Gly	Gln	Thr	Leu	Ala	Pro	Arg	Gly	Gly	Ser	Pro	Arg	Ser	Gln	Ala	Ser	725	730	735	
Arg	Pro	His	Ile	Asn	Ser	Ala	Leu	His	Val	Glu	Asp	Lys	Ala	Ile	Ser	740	745	750	
Asp	Cys	Arg	Pro	Ser	Arg	Pro	Ser	His	Thr	Leu	Ser	Ser	Leu	Ala	Thr	755	760	765	
Gly	Ala	Ser	Gly	Gly	Pro	Pro	Val	Ser	Lys	Ala	Pro	Thr	Met	Asp	Ala	770	775	780	
Gln	Gln	Asp	Arg	Pro	Lys	Ser	Gln	Asp	Cys	Leu	Gly	Leu	Leu	Ala	Pro	785	790	795	800
Leu	Ala	Ser	Ala	Ala	Glu	Val	Phe	Ser	Thr	Ala	Pro	Val	Ser	Gly	Lys	805	810	815	

Lys His Arg Pro Pro Gly Pro Leu Phe Ser Ser Ser Asp Pro Leu Pro
820 825 830

Ala Thr Ser Ser His Ser Gly Asp Ser Ala Gln Asp Thr Ser Leu Ile
835 840 845

Pro Ala Pro Phe Thr Pro Ala Ser Arg Asp Ala Gly Ile Arg Arg
850 855 860

<210> 142
<211> 29
<212> PRT
<213> Homo sapiens

<400> 142
Met Ser Tyr Leu Ser Leu Leu Leu Ile Ser Ile Phe Met Val Cys Tyr
1 5 10 15

Phe Lys Arg Asn Ser Phe Pro Ile Thr Ile Leu Phe Ser
20 25

<210> 143
<211> 32
<212> PRT
<213> Homo sapiens

<400> 143
Met Pro Trp Pro Met Pro Ile Cys Thr Gly Thr Gln Gly Val Leu Thr
1 5 10 15

His Arg Gln Gly Pro Pro Pro Ala Ala Val Gly Val Ser Pro His Thr
20 25 30

<210> 144
<211> 29
<212> PRT
<213> Homo sapiens

<400> 144
Met Asn Ala Phe Leu Leu Glu Arg Met Thr Glu Ser Gln Ala Met Asp
1 5 10 15

Ile Gln Thr Cys Ile Phe Gln Thr Leu Leu Glu Asn Lys
20 25

<210> 145
<211> 48
<212> PRT
<213> Homo sapiens

<400> 145
Met Ile Val Thr Asn Thr Ile Leu Lys Phe Ile His Lys Lys Pro Thr
1 5 10 15

Thr Ile Thr Pro Thr Lys Gln His Gly Ile Ile Phe Ser Val Pro Glu
20 25 30

Ala Lys Val Arg Ala Leu Leu Cys Phe Leu Leu Arg Met Pro Ser Pro
35 40 45

<210> 146
<211> 55
<212> PRT
<213> Homo sapiens

<400> 146
Gly Gln Ala Leu Trp Leu Met Pro Val Ile Pro Val Val Ala Lys Ala
1 5 10 15

Glu Gly Lys Asp His Leu Arg Pro Gly Val Ala Asn Gln Pro Gly Gln
20 25 30

His Ser Lys Thr Leu Phe Leu Gln Lys Lys Asn Phe Ala Lys Leu Ala
35 40 45

Glu His Gly Gly Ala Cys Leu
50 55

<210> 147
<211> 55
<212> PRT
<213> Homo sapiens

<400> 147

Met Ser Arg Phe Arg Ile Gln Thr Ser Glu Thr Ala Pro Ile Pro Leu
 1 5 10 15

Val Ser His Pro His Thr Pro Leu Ser Asn Asn Asn Asn Leu His Leu
 20 25 30

Gly Asn Val Cys Tyr Val Pro Gly His Thr Gly Ile Ile Ser Cys Thr
 35 40 45

Pro His Arg His Leu Ile Lys
 50 55

<210> 148
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 148
 Met Gln Gly Leu His Leu Pro Gln Gly Leu Gly Thr Cys Tyr Ser Ile
 1 5 10 15

Cys Leu Gln Cys Leu Ser Pro His Gly Tyr Phe Phe Val Ala Val Gly
 20 25 30

Leu Ser Ser Asn Val Met Ser Pro Thr Ser Leu Pro Lys Ala Val Leu
 35 40 45

Pro Thr
 50

<210> 149
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 149
 Met Leu Pro Val Asn Ile Ser His Pro Leu Ser Arg Gly Asn Pro Leu
 1 5 10 15

Leu Ser Ser Lys Phe Ser Lys Phe Phe Leu Ile Glu Phe Ser Gln
 20 25 30

<210> 150
 <211> 36
 <212> PRT

<213> Homo sapiens

<400> 150

Met Asp Tyr Ser Leu Ser Phe Asp Asn Tyr Thr Trp Gly Phe Gly Glu
1 5 10 15

Pro Arg Ile Lys Val Gln Ser Phe Asn Asp Leu Leu Ala Pro Gly Leu
20 25 30

Thr Gln Glu His
35

<210> 151

<211> 85

<212> PRT

<213> Homo sapiens

<400> 151

Met Ile Arg Ser Lys Gly Thr Asn Phe Gln Ile Leu Ala Glu Leu Phe
1 5 10 15

Lys Gly Met Asp Phe Leu Trp Leu Gln Leu Ala Arg Leu Phe Gln Lys
20 25 30

Ala Cys Pro Trp Leu Thr Ala Cys Leu Ala Gln Phe Leu Arg Ser Pro
35 40 45

Leu Val Met Glu Asn Arg Ala Asp Arg Ile Gln Met Ala Arg Phe His
50 55 60

Arg Gly Gln Gly Gly Pro Gln Ser Ala Asn Gln Gly Arg Leu Arg Pro
65 70 75 80

Glu Lys Gly Ile Ser
85

<210> 152

<211> 73

<212> PRT

<213> Homo sapiens

<400> 152

Met Asp Arg Phe Leu Asn Ser Lys Ala Arg Arg Leu Gly Ser Cys Ser
1 5 10 15

His Pro Ala Phe Tyr Leu Leu Cys Val Pro Asp Glu Asp Thr Ser Cys

20

25

30

Ser Thr Met Tyr Leu Pro Leu Lys Arg Arg Ala Asp Pro Asp Gln Leu
 35 40 45

Phe Ser Asp Leu Leu Gly Gly Thr Gln Arg Leu Trp Arg Leu Trp Pro
 50 55 60

Ser Leu Ala Ser Val Glu Ser Gly Leu
 65 70

<210> 153

<211> 63

<212> PRT

<213> Homo sapiens

<400> 153

Met Gln Cys Thr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10 15

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 20 25 30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Lys Ile Lys Phe Gly
 35 40 45

Met Lys Gln Glu Leu Ser Trp Thr Ile Tyr Asn Leu Leu Arg Tyr
 50 55 60

<210> 154

<211> 46

<212> PRT

<213> Homo sapiens

<400> 154

Met Arg Cys Leu Leu Ala Asp Ser Ser Leu Gln Met Gln Pro Gly Asp
 1 5 10 15

Val Thr Leu Arg Leu Glu Ser Cys Gly Ser Asn Pro Arg Gln Arg Gln
 20 25 30

Leu His Gln Val Leu Val Trp Val Arg Asn Arg Gly Lys Gly
 35 40 45

<210> 155

<211> 72
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (22)

<400> 155
Met Pro Pro Arg Gly Trp Ala Cys Pro Ser Ser Gly Pro Pro Ala Pro
1 5 10 15

Gly Pro Gly Arg Trp Xaa Arg Ala Ala Ala Gly Gly Leu Arg Arg Thr
20 25 30

Arg Cys Asp Trp Leu Pro Leu Arg Arg Thr Gln Met Ser Leu Arg Arg
35 40 45

Ile Asp Leu Leu Pro Ser Pro Ala Gly Gln Ala Gln Ala Gly Ser Glu
50 55 60

Asn Tyr Leu Pro Leu Phe Ile Ser
65 70

<210> 156
<211> 20
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (10)

<220>
<221> UNSURE
<222> (13)..(14)

<220>
<221> UNSURE
<222> (16)

<220>
<221> UNSURE
<222> (20)

<400> 156
Met Val Phe Ile Phe Ser Thr Thr Ile Xaa Phe Phe Xaa Xaa Glu Xaa

1

5

10

15

Glu Ser Cys Xaa

20

<210> 157

<211> 66

<212> PRT

<213> Homo sapiens

<400> 157

Met Ser Leu Thr Tyr Ser Trp Lys Lys Ser Lys Val Thr Lys Phe Asn

1

5

10

15

Leu Ser Thr Leu Arg Met Thr Val Thr Asn Lys Asn Arg Thr Val Gln

20

25

30

Lys Cys Ala Lys Asp Thr Arg Lys Leu Asn Asn Ile Asn Ser Met Ile

35

40

45

Ile Val Ile Leu Tyr Thr Met Glu Ser Lys Gln Ile Phe Phe His Gly

50

55

60

Asn Ser

65

<210> 158

<211> 41

<212> PRT

<213> Homo sapiens

<400> 158

Met Met Thr Gly Glu Ala Arg Glu Ser Gln Ile Ala Leu Tyr Lys Gln

1

5

10

15

Arg Phe Arg Glu Phe Arg Glu Glu Gly Arg Thr Ile Tyr Lys Gly Arg

20

25

30

Trp Lys Arg Ser His Leu Ala Glu Gly

35

40

<210> 159

<211> 31

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (7)

<400> 159

Met Leu Glu Leu Gly Leu Xaa Pro Lys Leu Thr Ser Glu Tyr Arg Phe
1 5 10 15

Pro Pro Asn Cys Met Ile Leu His Ile Trp Ser Gln Leu Glu Val
20 25 30

<210> 160

<211> 75

<212> PRT

<213> Homo sapiens

<400> 160

Met Tyr Ile Tyr Ile Cys His His Phe Lys Asn Gln Ala Phe Lys Val
1 5 10 15

Lys Leu Ser Phe Pro His Ile Phe Phe His Ser Ile Phe Tyr Gln Tyr
20 25 30

Arg His Ser Leu Leu Leu Leu Ser Phe Gln Phe Pro Ile Ile Ser Ser
35 40 45

His Pro Ile Phe Cys Ala Ser Ser Val Phe Lys Thr His Ser Pro Ser
50 55 60

Ala Ala Met Ala Pro Thr Ile Ile Phe Ile Thr
65 70 75

<210> 161

<211> 36

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (7)..(13)

<400> 161

Met Lys Arg Gly Asn Leu Xaa Xaa Xaa Xaa Xaa Xaa Gly Thr Pro
1 5 10 15

Cys Lys Asp Trp Ser His Thr Ala Met Ser Gln Glu Pro Pro Val Leu
 20 25 30

Val Arg Val Leu
 35

<210> 162
 <211> 24
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (9)

<220>
 <221> UNSURE
 <222> (20)

<400> 162
 Met Trp Ala Ala Trp Arg Arg Arg Xaa Asn Gly Phe Phe Pro Arg Ile
 1 5 10 15

Pro Gly Lys Xaa Arg Gly Pro Asn
 20

<210> 163
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 163
 Met Cys His Ser Leu Tyr Arg Phe Leu Asn Cys His Ser Arg Tyr Tyr
 1 5 10 15

Ile Val Tyr Thr Tyr Leu Thr Ile Phe Tyr Trp Cys His His Phe
 20 25 30

<210> 164
 <211> 134
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE

<222> (2)..(22)

<220>

<221> UNSURE

<222> (39)..(67)

<220>

<221> UNSURE

<222> (79)..(113)

<400> 164

Met Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Xaa Xaa Xaa Xaa Xaa Ala Gly Lys Arg Glu Asn Gln Lys Asp Ser
20 25 30

Ser Val Arg Arg Thr Trp Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
35 40 45

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
50 55 60

Xaa Xaa Xaa Arg Phe Ser Pro Arg Ala Tyr Arg Lys Lys Val Xaa Xaa
65 70 75 80

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
85 90 95

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
100 105 110

Xaa Arg His Asn Arg Lys Leu Ile His Leu Ser Ser Lys Phe Leu Ile
115 120 125

Ile Asn Val Ile Ala Ser
130

<210> 165

<211> 51

<212> PRT

<213> Homo sapiens

<400> 165

Met Ser Lys Val Asp Leu Phe Ile Thr Asp Ser Phe Lys Lys Phe Asn
1 5 10 15

Gln Tyr Leu Leu Ala Thr Tyr Ser Thr Ser Gly Thr Gln Gly Ile Trp
20 25 30

Ser Thr Thr Met Lys Lys Arg Asp Trp Thr Leu Lys Glu His Arg Ser
35 40 45

Cys His Phe
50

<210> 166
<211> 60
<212> PRT
<213> Homo sapiens

<400> 166
Met Ser Asp Ser Arg Leu Cys Ser Cys Phe Leu His Thr Leu Ile Phe
1 5 10 15

Leu Asn Ile Ser Lys Ile Gln Ser Gly Ser Lys Ile Thr Cys Lys Asn
20 25 30

Ile Leu Ala Gln Glu Phe Asp Arg Leu Lys Ile Asn Tyr Leu Lys Tyr
35 40 45

Ile Lys Gln Glu Val Tyr Leu Leu Tyr Ser Met Tyr
50 55 60

<210> 167
<211> 15
<212> PRT
<213> Homo sapiens

<400> 167
Met Val Phe Gln Lys Thr Ser Leu Tyr Ser Asn Asn Ile Leu Leu
1 5 10 15

<210> 168
<211> 106
<212> PRT
<213> Homo sapiens

<400> 168
Cys Pro Ala Ala Tyr Thr Val Phe Leu Thr Arg Ile Ile Val Lys Tyr
1 5 10 15

Tyr Leu Asn Arg Gly Leu Phe Ser Glu Thr Pro Ser Asn Leu Lys Val
 20 25 30
 Glu Glu Lys Gly Trp Val Trp Trp Leu Met Pro Val Thr Pro Ala Leu
 35 40 45
 Trp Glu Ala Glu Ala Gly Gly Ser Leu Glu Leu Ser Leu Arg Pro Gly
 50 55 60
 Trp Ala Thr Pro Ser Leu Pro Lys Asn Thr Lys Met Ser Gln Ala Trp
 65 70 75 80
 Trp Cys Thr Pro Val Val Pro Ala Ala Leu Gly Ala Glu Val Gly Gly
 85 90 95
 Arg Leu Gly Pro Arg Arg Trp Arg Leu Gln
 100 105

<210> 169
 <211> 19
 <212> PRT
 <213> Homo sapiens

<400> 169
 Met Gly Pro Asp Arg Leu Lys Gln Lys Ser Asn Thr Ala Val Val Ser
 1 5 10 15

Arg Trp Ile

<210> 170
 <211> 47
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (3)..(4)

<220>
 <221> UNSURE
 <222> (13)

<220>
 <221> UNSURE
 <222> (16)

<400> 170

Met Asp Xaa Xaa Lys Trp Arg Met Arg Arg Gln Pro Xaa Ile Asn Xaa
1 5 10 15

Met Tyr Gln Thr Val Thr Ile Cys Glu Glu Tyr Cys Val Tyr Thr Asn
20 25 30

Arg Lys Gln Leu Lys Ala Phe Asn Met Cys Gly Trp Gly Glu Arg
35 40 45

<210> 171

<211> 197

<212> PRT

<213> Homo sapiens

<400> 171

Gln Glu Ala Gln Ile Met Lys Lys Leu Arg His Asp Lys Leu Val Pro
1 5 10 15

Leu Tyr Ala Val Val Ser Glu Glu Pro Ile Tyr Ile Val Thr Glu Phe
20 25 30

Met Ser Lys Gly Ala Tyr Ser Leu Ser Ile Arg Asp Trp Asp Glu Ile
35 40 45

Arg Gly Asp Asn Val Lys His Tyr Lys Ile Arg Lys Leu Asp Asn Gly
50 55 60

Gly Tyr Tyr Ile Thr Thr Arg Ala Gln Phe Asp Thr Leu Gln Lys Leu
65 70 75 80

Val Lys His Tyr Thr Glu His Ala Asp Gly Leu Cys His Lys Leu Thr
85 90 95

Thr Val Cys Pro Thr Val Lys Pro Gln Thr Gln Gly Leu Ala Lys Asp
100 105 110

Ala Trp Glu Ile Pro Arg Glu Ser Leu Arg Leu Glu Val Lys Leu Gly
115 120 125

Gln Gly Cys Phe Gly Glu Val Trp Met Gly Thr Trp Asn Gly Thr Thr
130 135 140

Lys Val Ala Ile Lys Thr Leu Lys Pro Gly Thr Met Met Pro Glu Ala
145 150 155 160

Phe Leu Gln Glu Ala Gln Ile Met Lys Lys Leu Arg His Asp Lys Leu
165 170 175

Val Pro Leu Tyr Ala Val Val Ser Glu Glu Pro Ile Tyr Ile Val Thr
180 185 190

Glu Phe Met Ser Lys
195

<210> 172
<211> 59
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (28)..(49)

<400> 172
Met Cys Ile Met His Ile Asn Thr Phe Asn Leu Cys Asn His Leu Met
1 5 10 15

Arg Trp Leu Leu Leu Lys Ser Pro Leu Cys Thr Xaa Xaa Xaa Xaa Xaa
20 25 30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
35 40 45

Xaa Gln Lys Pro Lys Pro Thr Val His Gly Ile
50 55

<210> 173
<211> 56
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (14)..(21)

<400> 173
Met Lys Pro Ile Arg Gln Leu Val Pro Phe Thr Leu Glu Xaa Xaa Xaa
1 5 10 15

Xaa Xaa Xaa Xaa Xaa Leu Tyr Leu Glu His Leu Thr Cys Arg Lys Arg
20 25 30

Arg Gly Lys Thr Phe Leu Gly Lys Arg Lys Ala Val Ala Val Pro Lys
 35 40 45

Ser Lys His Phe Trp Gln Gly Phe
 50 55

<210> 174
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 174
 Met Leu Lys His Leu Gln Val Leu Asp Leu His Gln Cys Ser Leu Thr
 1 5 10 15

Ala Asp Asp Val Met Ser Leu Thr Gln Val Ile Pro Leu Leu Ser Asn
 20 25 30

Leu Gln Glu Leu Asp Leu Ser Ala Asn Lys Lys Met Gly Ser Ser Ser
 35 40 45

Glu Asn Leu Leu Ser Arg Leu Arg Phe Leu Pro Ala Leu Lys Ser Leu
 50 55 60

Val Ile Asn Asn Cys Ala Leu Glu Ser Glu Thr Phe Thr Ala Leu Ala
 65 70 75 80

Glu Ala Ser Val His Leu Ser Ala Leu Glu Val Phe Asn Leu Ser Trp
 85 90 95

Glu Gln Val Cys Trp Trp Ala Thr
 100

<210> 175
 <211> 490
 <212> PRT
 <213> Homo sapiens

<400> 175
 Met Ser Gln Thr Arg Lys Lys Thr Ser Ser Glu Gly Glu Thr Lys Pro
 1 5 10 15

Gln Thr Ser Thr Val Asn Lys Phe Leu Arg Gly Ser Asn Ala Glu Ser
 20 25 30

Arg	Lys	Glu	Asp	Asn	Asp	Leu	Lys	Thr	Ser	Asp	Ser	Gln	Pro	Ser	Asp		
		35					40					45					
Trp	Ile	Gln	Lys	Thr	Ala	Thr	Ser	Glu	Thr	Ala	Lys	Pro	Leu	Ser	Ser		
		50				55					60						
Glu	Met	Glu	Trp	Arg	Ser	Ser	Met	Glu	Lys	Asn	Glu	His	Phe	Leu	Gln		
	65				70					75					80		
Lys	Leu	Gly	Lys	Lys	Ala	Val	Asn	Lys	Cys	Leu	Asp	Leu	Asn	Asn	Cys		
				85					90					95			
Gly	Leu	Thr	Thr	Ala	Asp	Met	Lys	Glu	Met	Gly	Glu	Ala	Phe	Glu	Met		
			100					105						110			
Ile	Pro	Glu	Leu	Glu	Glu	Leu	Asn	Leu	Ser	Trp	Asn	Ser	Lys	Val	Gly		
		115					120						125				
Gly	Asn	Leu	Pro	Leu	Ile	Leu	Gln	Lys	Phe	Gln	Lys	Gly	Ser	Lys	Ile		
	130					135						140					
Gln	Met	Ile	Glu	Leu	Val	Ala	Cys	Ser	Leu	Thr	Ser	Glu	Asp	Gly	Thr		
	145				150					155					160		
Phe	Leu	Gly	Gln	Leu	Leu	Pro	Met	Leu	Gln	Ser	Leu	Glu	Val	Leu	Asp		
			165						170						175		
Leu	Ser	Ile	Asn	Arg	Asp	Ile	Val	Gly	Ser	Leu	Asn	Ser	Ile	Ala	Gln		
			180					185						190			
Gly	Leu	Lys	Ser	Thr	Ser	Asn	Leu	Lys	Val	Leu	Lys	Leu	His	Ser	Cys		
		195					200					205					
Gly	Leu	Ser	Gln	Lys	Ser	Val	Lys	Ile	Leu	Asp	Ala	Ala	Phe	Arg	Tyr		
		210				215					220						
Leu	Gly	Glu	Leu	Arg	Lys	Leu	Asp	Leu	Ser	Cys	Asn	Lys	Asp	Leu	Gly		
	225				230					235					240		
Gly	Gly	Phe	Glu	Asp	Ser	Pro	Ala	Gln	Leu	Val	Met	Leu	Lys	His	Leu		
				245					250					255			
Gln	Val	Leu	Asp	Leu	His	Gln	Cys	Ser	Leu	Thr	Ala	Asp	Asp	Val	Met		
			260					265						270			
Ser	Leu	Thr	Gln	Val	Ile	Pro	Leu	Leu	Ser	Asn	Leu	Gln	Glu	Leu	Asp		
		275					280					285					

Leu Ser Ala Asn Lys Lys Met Gly Ser Ser Ser Glu Asn Leu Leu Ser
 290 295 300

Arg Leu Arg Phe Leu Pro Ala Leu Lys Ser Leu Val Ile Asn Asn Cys
 305 310 315 320

Ala Leu Glu Ser Glu Thr Phe Thr Ala Leu Ala Glu Ala Ser Val His
 325 330 335

Leu Ser Ala Leu Glu Val Phe Asn Leu Ser Trp Asn Lys Cys Val Gly
 340 345 350

Gly Asn Leu Lys Leu Leu Leu Glu Thr Leu Lys Leu Ser Met Ser Leu
 355 360 365

Gln Val Leu Arg Leu Ser Ser Cys Ser Leu Val Thr Glu Asp Val Ala
 370 375 380

Leu Leu Ala Ser Val Ile Gln Thr Gly His Leu Ala Lys Leu Gln Lys
 385 390 395 400

Leu Asp Leu Ser Tyr Asn Asp Ser Ile Cys Asp Ala Gly Trp Thr Met
 405 410 415

Phe Cys Gln Asn Val Arg Phe Leu Lys Glu Leu Ile Glu Leu Asp Ile
 420 425 430

Ser Leu Arg Pro Ser Asn Phe Arg Asp Cys Gly Gln Trp Phe Arg His
 435 440 445

Leu Leu Tyr Ala Val Thr Lys Leu Pro Gln Ile Thr Glu Ile Gly Met
 450 455 460

Lys Arg Trp Ile Leu Pro Ala Ser Gln Glu Glu Glu Leu Glu Cys Phe
 465 470 475 480

Asp Gln Asp Lys Lys Lys Lys His Ser Leu
 485 490

<210> 176

<211> 136

<212> PRT

<213> Homo sapiens

<400> 176

Met His Leu Leu Ser Asp Gly Lys Glu Gly Ser Thr Tyr Lys Pro Phe
 1 5 10 15

Gln Glu Ile Ser Ser Ser Ser Lys Ser Gly Arg Lys Gly Ser Lys Ala
 20 25 30

Thr Ile Ser Phe Met Ser Ala Val Val Asn Pro Gln Leu Phe Lys Ser
 35 40 45

Arg His Leu Leu Thr Ala Phe Leu Pro Ser Phe Cys Arg Lys Cys Ser
 50 55 60

Phe Phe Ser Ile Leu Asp Leu His Ser Ile Ser Glu Leu Arg Gly Leu
 65 70 75 80

Ala Val Ser Glu Val Ala Val Phe Cys Ile Gln Ser Leu Gly Trp Glu
 85 90 95

Ser Leu Val Leu Arg Ser Leu Ser Ser Phe Leu Leu Ser Ala Leu Glu
 100 105 110

Pro Leu Arg Asn Leu Leu Thr Val Glu Val Trp Gly Leu Val Ser Pro
 115 120 125

Ser Glu Glu Val Phe Phe Leu Val
 130 135